## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001115

A.	CLASSIFICATION OF SUBJECT MATTER							
Int. Cl. 7:	C07H 15/14; A61K 31/70; A61P 31/04							
According to International Patent Classification (IPC) or to both national classification and IPC								
B. FIELDS SEARCHED								
Minimum docu	Minimum documentation searched (classification system followed by classification symbols)							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched								
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) STN: Partial Substructure Search based on exemplified compounds								
C. DOCUMENTS CONSIDERED TO BE RELEVANT								
Category* .	* Citation of document, with indication, where appropriate, of the relevant passages							
P, X	WO 2003/070715 A (MONASH UN Whole Document	IVERSI	TY et al) 28 August 2003	1-27				
X  A	Owen et al, "A one-pot synthesis of novel N,N-dialkyl-S-glycosylsulfenamides", Carbohydrate Research, Vol. 328, 2000, pages 287-292 Whole Document, especially compound 4  Hoshi et al, "Antitumor activity of 5-formido-1-β-D-ribofuranosylthioimidazole-4-carboxamide 2',3',5'-triformate on a variety of animal tumors", STN File CA Online Abstract No. 76:211 & Cancer Chemotherapy Reports, Part 1 (1971), 55 (3), pages 229-231							
	Further documents are listed in the con			ex				
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "X" document defining the general state of the art which is not considered to be of particular relevance  "Conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered no or cannot be considered to involve an inventive step when the document is taken alone								
or which is cited to establish the publication date of another citation or other special reason (as specified) sucl document referring to an oral disclosure, use, exhibition or other means "&" doc "P" document published prior to the international filing date		ument of particular relevance; the claimed invention cannot be considered to olve an inventive step when the document is combined with one or more other h documents, such combination being obvious to a person skilled in the art ument member of the same patent family						
Date of the actual completion of the international search  Date of mailing of the international search report								
28 September 2004			6 OCT 2004					
AUSTRALIAN PATENT OFFICE			Authorized officer  R.L. POOLEY  Telephone No: (02) 6283 2242					

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001115

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:    Claims Nos.:   C
because they relate to subject matter not required to be searched by this Authority, namely:  2. X Claims Nos.: 1-21, 23-27 (in Part)  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
2. X Claims Nos.: 1-21, 23-27 (in Part)  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
an extent that no meaningful international search can be carried out, specifically:  Claim 1 and its dependant claims 2-21 and 23-27 encompass a broad and diverse range of carbocyclic and heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
heterocyclic sulfenamide compounds such that a meaningful search covering the full breadth of these claims is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
is not feasible. Accordingly, for economic reasons the search has been largely based on the galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
galactofuranosyl and arabinofuranosyl sulfenamide compounds supported by the description.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.  2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
<ol> <li>As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.</li> <li>As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.</li> <li>As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:</li> </ol>
searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
searchable claims.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
covers only those claims for which fees were paid, specifically claims Nos.:
<u> </u>
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001115

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
wo	2003/070715	· NIL			
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
			END OF ANNEX		